Computer Configuration and Related Recommendations
Fall 2015

If you plan to purchase a computer before school starts, below are some minimum configurations and facts that may be helpful. If you are buying a computer, we recommend a new one. For a little more money, you get a much faster computer with a warranty: a much better value.

CPU
Within the same family of processors, higher clock speeds and more cache (up to 6MB) means better performance. The Intel Core i series (4th generation) is highly recommended as it offers good performance and long battery life. There are Core i3, Core i5 and Core i7 processers. The higher the numbers the more powerful the processer

Operating System
Windows 7 or later is recommended. 64bit version is required if you want to use more than 4GB of RAM. Windows 8.1 is very similar to Windows 7, though it has a new interface that is optimized for touch screens.

Hard Drive
120 Gigabytes (GB) minimum. If you will be using statistical or database software with very large data sets you may want at least 256GB. Faster hard drives (7200RPM or 10,000RPM) offer better performance. Though they cost more, solid state hard drives offer the best performance and reliability but lower capacity for the money.

RAM
4GB is recommended as a minimum. 8GB is preferred as it will let you run more programs at the same time.

Optical Drive
The base for all computers is DVD-ROM. Most new computers come with a DVD burner though some ultrabooks and other very light computers will dispense with an optical drive altogether. If you wish to watch Blu-ray movies on your computer you may have the option of a Blu-ray drive.

Removable Storage
USB flash memory/thumb drive: These devices are small, fast, come in capacities ranging from 16MB to over 512GB. They connect via the USB port found on all computer made in the last 15 years. Encrypted flash drives are highly recommended to ensure that your personal documents are kept secure. If your flash drive is not encrypted, we recommend password protecting your files. If your flash drive is lost or stolen, your personal information will be secure. For more information on encrypting files and setting passwords, see *Instructions for Using 7-Zip to Encrypt Files*.

Sound
Laptop audio is usually not configurable, but desktops often give you options better sound cards and speakers.

Video
64 MB minimum, the higher end graphic cards are better suited for videos and gaming. The video card built into new computers is more than adequate for non-gaming applications. If you purchase an Apple laptop and plan to give presentations, you will want to purchase the video dongle that lets you connect to a VGA projector.

Monitor
For desktops 17" minimum, 19" recommended. For laptops, 12" to 14.1" recommended. Smaller screens are lighter but offer less real estate. Larger screens make it easier to work on large spreadsheets, but make the laptop larger and heavier.

Netbooks and Tablets
While netbooks and tablet computers offer a small, light, and affordable computing option, they are often unsuitable for doing more involved work such as writing papers. The screen is often very small, leading to eye strain and uncomfortable seating position. The keyboard and/or touch screen is often small and not conducive to typing for extended periods of time. Before deciding to buy a netbook, we recommend trying one at a local store. Please keep in mind that printing options are very limited with tablets.

Wireless
Wireless connectivity (WiFi) is highly recommended for all laptops. When purchasing this feature, keep in mind that the University uses 802.11n standard. The entire Social Work building has wireless internet. For more information see:
http://cuit.columbia.edu/columbia-u-secure-wireless-network

You can also setup your laptop to print to the Social Work printers. For instructions for printing from your laptop see:
http://cuit.columbia.edu/pawprintquickstart

Ethernet
If you are in campus housing that has been wired for the Columbia Ethernet network (all C. U. dorms, plus some C. U. apartment buildings), or if you plan to use a DSL or cable modem connection from home, you will need an Ethernet card. Ethernet is standard on current desktops and notebooks. There are also several places on campus you may plug into the network, including the Social Work building.

Bluetooth
You may choose to get bluetooth on your computer. Bluetooth is a personal area networking technology that lets devices such as printers, mice, headphones, phones, etc. talk to each other.

Service/Warranty
If your computer vendor offers a 3-year extended on-site service warranty, and you are not comfortable fixing your own computer, we suggest you purchase it. If you are buying a Dell or Apple through the Columbia discount program, you receive additional discounts if you opt for a 3-year warranty. You may also opt for a complete care type package that covers accidental damage.

Software

Backup

It is highly recommended that you back up your important documents and files to another medium. This can include physical media such as a usb flash drive or cloud storage such as Google drive. There also backup services that use software to back up your files automatically such as Carbonite and Mozy.

Security
CUIT offers Symantec AntiVirus for virus protection, and PC Phonehome at the following URL:
http://cuit.columbia.edu/cuit/software-downloads/computer-security-software

Productivity
You will probably want Microsoft Office 2010 Professional or later. (All editions have Word and Excel; the Professional Edition includes Access, a database application.) All other software you can purchase at the CU bookstore, or other software vendors. You can purchase the Student and Teacher edition at most retailers which allows you to install Word, Excel, Outlook, and PowerPoint on up to 3 computers.

You may also consider Openoffice.org. It is a free, multiplatform and multilingual office suite. It is generally interoperable with other office suites, though you may run into compatibility issues using advanced functions. http://www.openoffice.org/

SPSS (Statistical Package for the Social Sciences)
Students interested in licensing SPSS (PC/Mac) may purchase/lease the SPSS at a discount for either a six or twelve month license through e-academy at the following web site:
http://www.onthehub.com/spss/

Other Software
Columbia has various other software you may want at the following URL:
http://cuit.columbia.edu/cuit/software-downloads

Training
You may choose to take workshops offered by the libraries. There are classes offered for various software including Adobe Photoshop, Endnote, FileMaker Pro, NVIVO, and RefWorks.
http://library.columbia.edu/research/workshops.html